

Patent Claims

1. Gas-filled surge arrester with at least two electrodes, whereof two electrodes are fashioned as end electrodes with a flange-like foot part, and with at least one hollow-cylindrical ceramic insulator whose face end is soldered
5 to the foot part of an electrode and to a further electrode, whereby the foot part of each end electrode has an electrical terminal allocated to it in the form of a tightly fitting clip that also embraces the ceramic insulator adjacent to the foot part over a part of its axial length and whose radially projecting ends are positively connected to one another,
10 characterized in that each clip (2; 24, 25) is resiliently fashioned in circumferential direction.
2. Gas-filled surge arrester according to claim 1, characterized in that the clip is provided by means of a two-legged, clamp-like batter (23).
3. Gas-filled surge arrester according to claim 1 or 2, whereby a middle
15 electrode as third electrode is arranged in addition to two end electrodes, characterized in that the clip (24) projects axially beyond the foot part (14) of the respective end electrode, whereby the projecting region has parts of a short-circuit device (4, 7, 24) (fail-safe mechanism) electrically connected to the middle electrode allocated to it.
4. Gas-filled surge arrester according to claim 3, characterized in that parts of
20 an auxiliary discharge path (5) circuited electrically parallel to the gas discharge path are additionally allocated to the projecting region of the clip (24).
5. Gas-filled surge arrester according to claim 4, characterized in that the short-circuit device comprises a disk-shaped auxiliary electrode (7) whose diameter is at least equal to the outside diameter of the clip (24) and that is held spaced from the
25 edge of the clip by means of a fusion disk (4) and a spacer (5) that are arranged within the projecting part of the clip, and that is pressed against the spacer (5) with a spring (8).
6. Gas-filled surge arrester according to claim 5, characterized in that the spacer (5) is composed of a varistor.

7. Gas-filled surge arrester according to claim 5 or 6, characterized in that the spring (81) is fixed by means of a U-shaped shackle (82) fixed to the middle electrode.

8. Gas-filled surge arrester according to claim 7, characterized in that the
5 spring is fashioned as coil spring (81) or a spring washer (83).

9. Gas-filled surge arrester according to claim 1, characterized in that the clip comprises the form of a cap (25) with a hollow-cylindrical edge region (26) and a planar cover region (27) provided with a central opening (28), whereby the edge region (26) has its circumference provided with a plurality of bead-like impressions
10 (30) lying against the foot part of the respective end electrode (33).

10. Gas-filled surge arrester according to claim 9, whereby a middle electrode as third electrode is arranged in addition to two end electrodes, characterized in that the clip (25) projects axially beyond the foot part (15) of the respective end electrode (14), whereby the projecting region is part of a short-circuit device (4; 84) (fail-safe
15 mechanism) electrically connected to the middle electrode.

11. Gas-filled surge arrester according to claim 9, characterized in that the clip (25) is additionally part of an auxiliary discharge path (5) circuited electrically parallel to the gas discharge path.

12. Gas-filled surge arrester according to claim 11, characterized in that
20 the short-circuit device is formed by the planar cover surface (27) of the cap (25) and by that end (84) of a spring clip (8) connected to the center electrode (13) that is free and engages into the center opening (28) of the cap, whereby the free end (84) of the spring clip is held spaced from the planar cover surface (27) of the cap by means of a fusion disk (4) and the auxiliary discharge path (5) that are arranged within the cap
25 (25), and the fusion disk (4) or the auxiliary discharge path (5) is insulated from the planar cover surface (27) of the cap (25) by means of an insulating centering member (9).

13. Gas-filled surge arrester according to claim 12, characterized in that the auxiliary discharge path (5) is composed of a varistor that is arranged insulated by
30 means of the insulating centering member (9).